

ON THE NAIADES OF LONG ISLAND, N. Y.

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The following species are cited as occurring in this region: *Elliptio complanatus* Dillwyn (1). Described as being moderately abundant at Riverhead. *Anodonta implicata* Say (2, 3). Found in lakes at Prospect Park, Brooklyn, and at Baisely's Lake, Jamaica South. *Anodonta cataracta* Say (3), from Kissena Park Lake, Flushing. The writer notes the occurrence of this species at Lake Ronkonkema, a glacial kettle-hole lake near the center of the island, where it seems fairly common. This species is widely distributed over the Atlantic slope. A number of specimens were transferred to St. John's Lake, Cold Spring Harbor, in August 1923, where their further progress may be noted.

Ortmann remarks of the close relationship of *cataracta* and *implicata*, the latter differing from the former only by a thickening of the shell along its lower margin, a distinction hardly noticeable in young shells. *Anodonta* sp. are usually thin shelled under any condition of environment. Their ready adaptation to the lime-free waters of Long Island is thus easily understood. *E. complanatus* is a puzzling species due to the large number of variants representing it. While it is described as having a moderately thick shell, yet a form of it with shell so soft as to be easily indented with the finger, has been reported from a soft-water lake in Maine (4). This would seem to indicate similar adaptability as the *Anodontas*. All are members of the depauperate Atlantic Coast Fauna, having been reported from New England by Johnson (5), and being found further south. The fair probability is their introduction on Long Island, one way or another through the agency of birds.

A similarly curious distribution is reported for *A. cataracta* from the Tennessee drainage. This shell is not found in the Upper Tennessee drainage above Chattanooga except at a small pond near Knoxville, and at Wartburg on the Emory River. Yet it is abundant in the adjacent Cumberland river. Here

again transportation by birds is the most plausible factor to invoke to account for its presence in the pond at Knoxville, inasmuch as it is absent from the main river. Finally with regard to Long Island shells, it is undoubtedly true that other species can be transported similarly, but it is possible that the chemical composition of the water has favored the species cited.

BIBLIOGRAPHY

1. Smith, S., and Prime, Temple; "Report on Mollusca of Long Island, N. Y. and its Dependencies". Annals Lyceum Nat. Hist., N. Y., Vol 9, May 1870.

2. Wheat, S. C. "List of Long Island Shells". Brooklyn Conchol. Club Bulletin, Vol. I, No. I, 1907.

3. Ames. NAUT. 16, 1902.

4. Rich, S. C. "An aberrant form of *U. complanatus*". Science, N. S. Vol. XLII, 1905.

5. Johnston, C. W. "Fauna of New England, part 313, List of Mollusca". Boston Society of Nat. History 1915.

A LIST OF MOLLUSKS FROM INTERVALE, N. H.

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Following is a list of mollusks collected at Intervale, New Hampshire, during the last few years. Shells from this region, and the White Mountains in general, are not very common, and it is hoped this list will prove interesting. The land shells were largely collected in the woods on the side of Mt. Bartlett. Mr. Charles W. Johnson aided in naming the land shells, and the only *Musculium* was kindly determined by Dr. V. Sterki.

Polygyra albolabris (Say).

Dead and faded specimens were fairly common. Living shells, mostly young, were found on several occasions.

Polygyra fraterna (Say).

One live specimen found under damp leaves.

Pyramidula alternata (Say).

One live shell found in the sap hole of a maple.